



Image AF/2876\$

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

MICHAEL J. SMITH et al.

Group Art Unit: 2876

Examiner: S. Paik

Serial No.: 09/825,912

Filed: April 4, 2001

For: CENTRALIZED ELECTRONIC SAFE AND ACCOUNTING  
CONTROL SYSTEM

Attorney Docket No.: FIRE 0111 PUS

**APPEAL BRIEF**

Mail Stop Appeal Brief - Patents  
Commissioner for Patents  
U.S. Patent & Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

This is an appeal brief in support of the appeal from the final rejection of claims  
1-26 of the Office Action dated August 28, 2003. This application was filed on April 4, 2001.

03/02/2004 AWONDAF1 00000026 09825912

01 FC:1402  
02 FC:1251

330.00 OP  
110.00 OP

**I. REAL PARTY IN INTEREST**

The real party in interest is Fireking International, Inc., a corporation organized  
and existing under the laws of the state of Kentucky, and having a place of business at 101  
Security Parkway, New Albany, IN 47150, as set forth in the assignment recorded in the U.S.  
Patent and Trademark Office on June 1, 2001 Reel 011852, Frame 0750.

**CERTIFICATE OF MAILING UNDER 37 C.F.R. § 1.8**

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February 25, 2004  
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Jeremy J. Curcuri  
Name of Person Signing

Jeremy J. Curcuri  
Signature

## **II. RELATED APPEALS AND INTERFERENCES**

There are no appeals or interferences known to appellants, the appellants' legal representative, or the assignee which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

## **III. STATUS OF CLAIMS**

Claims 1-26 are pending in this application. Claims 1-26 have been rejected and are the subject of this appeal.

## **IV. STATUS OF AMENDMENTS**

No amendment has been filed after the final rejection.

## **V. SUMMARY OF THE INVENTION**

The invention relates to electronic lock and money control systems such as used by merchants to collect and disburse money during business operation. The invention further relates to a system capable of stand-alone operation as well as expanded networking and control of multiple electronic lock and money collection/dispensing units. (Page 1, lines 4-9.)

Generally, because merchants tend to maintain only a minimal amount of money in cash registers, accumulated money/cash is periodically transferred to an on-site safe or drop box. In the case of large business establishments, numerous safe units may be located at various locations throughout the store. Unfortunately, management, accounting, and oversight/maintenance of each machine require long and tedious efforts. In addition,

integration of additional units into an existing business generally requires a large expenditure to replace existing units for more sophisticated units. (Page 1, lines 10-28.)

It is an object of the invention to provide an electronic lock and money control system capable of single unit stand-alone operation, as well as expandability to a network of multiple units having one of the units operate as a centralized network controller. (Page 2, lines 1-5.)

Claim 1 sets forth an electronic lock and money control system comprising at least one safe. This is illustrated best in Figures 1-3. The at least one safe comprises a housing having an interior compartment for securing money, and an outer door 52 having an electronic lock mechanism 18,20 to control access to the interior compartment. The at least one safe further comprises a data input device 16,56, an electronic display 16,56, a connector interface 22 mounted to the housing, and a control system 10. Control system 10 is arranged to communicate with the data input device 16,56, electronic display 16,56, connector interface 22 and electronic lock mechanism 18,20. Control system 10 includes a processor 12 programmed to control operation of the electronic lock 18,20. Processor 12 is further programmed to operate as a central system controller when connected to at least one other remote safe via the connector interface 22 to monitor and accumulate financial and operational information for each remote unit (Figure 2). (Page 2, lines 6-17; page 5, lines 1-19.)

Claim 2 further points out that the at least one safe further comprises a bill validator apparatus 68. This is best illustrated in Figures 6-8. The bill validator apparatus 68 is mounted to the housing for receiving and validating bills of various denominations, and a storage device is located within the safe for storing all validated bills. The processor 12 is programmed to maintain a record of all received and validated bills. (Page 2, lines 18-23; page 8, lines 9-23.)

Claim 3 further points out a cash dispensing apparatus 60 mounted to the housing. This is best illustrated in Figures 4 and 5. The cash dispensing apparatus 60 includes a set of openings 62 in the housing arranged to be loaded with containers each containing money of a predetermined value, and a separate opening and dispensing tray 64 in the housing to dispense money containers for removal from the safe. (Page 2, lines 24-29; page 7, lines 9-24.)

Claim 4 further recites that the control system is further programmed to accumulate and track deposits and withdrawals of money, recognize user identification data, and store transaction data and associated user identity data in a memory. The processor 12 is further arranged to process and sort stored transaction and operational data to generate an audit report and accounting reports. (Page 3, lines 1-9; page 11, line 4 through page 13, line 7.)

Claim 5 further recites a remote safe unit connected to the connector interface 22. The remote safe unit comprises a bill validator apparatus 68. This is illustrated in Figure 9. The bill validator apparatus 68 is mounted to a housing of the remote safe unit for receiving and validating bills of various denominations, and a storage device is located within the remote safe for storing all validated bills. The processor 12 is programmed to maintain a record of all bills received and validated in the remote safe. (Page 2, lines 18-23; page 3, lines 1-5; page 9, lines 7-17.)

Claim 6 further recites that the connection interface 22 comprises a communications port 36,38 to allow communication between the control system and a remote computer (Figure 1). (Page 5, lines 13-19.)

Claim 7 further recites a remote safe unit connected to the connector interface 22 with the remote safe unit comprising a cash dispensing apparatus 60. This is best illustrated in Figure 10. The cash dispensing apparatus 60 is mounted to a housing of the remote safe unit. The cash dispensing apparatus includes a set of openings 62 in the housing arranged to

be loaded with containers each containing money of a predetermined value. A separate opening and dispensing tray 64 in the housing is for dispensing cash containers for removal from the safe. The processor is programmed to maintain a record of all money loaded and dispensed from the remote safe. (Page 2, lines 24-29; page 3, lines 1-5; page 9, lines 7-17.)

Claim 8 recites that the processor 12 is programmed to recognize different levels of user system access authority. (Page 2, lines 18-19; page 14, line 24 through page 15, line 6.)

Claim 9 further recites that one or more remote safe units are connected to the connector interface 22. The processor is further programmed to accumulate and track deposits and withdrawals of money, recognize user identification data, and store transaction data and associated user identity data in a memory for each remote unit. The processor is arranged to process and sort stored transaction and operational data to generate an individual and totaled audit and accounting reports. (Page 3, lines 1-9.) Further details of accounting and audit reports are given at page 11, line 4 through page 13, line 7. Some of the further details include, as recited by claim 10, the processor being arranged to selectively generate financial reports including individual user reports, cash showing actual cash present by location, and end day reports, as well as an audit report itemizing the occurrence of selected events during a specific time period.

Claim 11 recites a network of interconnected electronic locking and money control devices comprising a central processing system 10. Central processing system 10 is integrated with one of the electronic locking and money control devices and arranged to control operation of the integrated device. The central processing system 10 is connected to all other network devices, and further arranged to communicate with all the other network devices and provide network control of all the other devices (Figures 1-3). (Page 3, lines 10-16; page 5, lines 1-19.)

Claim 15 further recites that the central processing system is arranged to automatically detect and assign network addresses for devices added to the network. (Page 9, lines 18-30.)

Claim 13 further recites that the other network devices comprise a data entry subsystem arranged to receive and recognize user identification data, and transmit the data to the central processing system. The central processing system is arranged to determine whether the user is authorized to access the system, and control operation of the network device based on the authorization determination. (Page 2, lines 18-19; page 14, line 24 through page 15, line 6.)

Claim 14 further recites that the data entry system is arranged to receive the user identification data in the form of at least a user number, electronic key, or biometric identification. (Page 13, line 24 through page 14, line 3.)

Claim 15 further recites a network device used in the network of interconnected electronic locking and money control devices that is an electronic lock and control arrangement 18, 20.

As best shown in Figure 10, claim 16 recites that a network device is a cash dispensing apparatus 60. The cash dispensing apparatus 60 includes a set of openings 62 in the housing arranged to be loaded with containers. Each container contains cash of a predetermined value. A separate opening and dispenser 64 dispenses cash containers for removal from the safe. The cash dispensing apparatus 60 is arranged to maintain an accounting of all containers and provide a report to the central processing system. (Page 2, lines 24-29; page 3, lines 1-5; page 9, lines 7-17.)

As best shown in Figure 9, claim 17 further recites that a network device comprises a universal interface designed to communicate with a plurality of types of bill

validators 68. The bill validators 68 are arranged to receive and validate bills of various denominations. The universal interface is also designed to communicate with a storage device for storing all validated bills. The universal interface is programmed to maintain a record of all received and validated bills and provide a report to the central processing system. (Page 2, lines 18-23; page 3, lines 1-5; page 9, lines 7-17.)

Access control and permission related features are described in the specification at page 2, lines 18-19 and page 14, line 24 through page 15, line 6. Further detailed permission level discussion occurs in the specification at page 15, line 7 through page 17, line 24. These various features are recited by claims 18-21. More specifically, claim 18 recites that the central processing system is fully programmable via a data entry subsystem arranged to receive and recognize user identification data, and transmit the data to the central processing system. Claim 19 recites that the central processing system is programmed to recognize different levels of user system access authority. Claim 20 further recites that the central processing system is programmed to recognize a level of user system access authority as a function of time or date. Claim 21 recites that the central processing system is programmed to assign selected devices to an access group to provide flexible levels of user access.

Claims 22-26 recite various features related to reporting. Summary details of accounting and audit reports are given in the specification at page 3, lines 1-9. Further details with regard to reports are given at page 11, line 4 through page 13, line 7 (accounting and audit reports), page 12, lines 1-10 (user reports), page 12, lines 11-18 (end-day reports), page 12, lines 19-25 (cash reports), page 12, line 26 through page 13, line 7 (audit reports), page 13, lines 8-13 (configuration reports), and additional reports are further described at page 13, lines 14-23.

Claim 22 recites that the central processing system is programmed to accumulate and track deposits and withdrawals of money from all devices on the network, recognize user identification data, and store transaction data and associated user identity data in a memory for

each device connected to the network. The central processing system is arranged to process and sort stored transaction and operational data to generate an individual and totaled audit and accounting reports.

Claim 23 recites that the central processing system is programmed to develop entities of money that comprise one or more of the devices connected to the network and process the developed entities as a single device for access and accounting purposes, while also being able to track each device separately.

Claim 24 recites that the central processing system is programmed such that entities of money may comprise other entities of money as well as one or more of the devices on the network or remote sub-networks and treat them as one for access and accounting purposes, without losing the ability to track each entity of money or device separately if needed.

Claim 25 recites that the central processing system is arranged to selectively generate financial reports including individual user reports, a cash report showing actual cash present by location, and end-day reports, as well as an audit report itemizing the occurrence of selected events during a specific time period.

Claim 26 recites that each device connected to the network is arranged to store individual configuration information, monetary totals and a selected audit information to facilitate replacement of the central processing system.

## **VI. ISSUES**

1. Whether claims 1-26 are unpatentable over Brooks, Jr. et al. (U.S. Patent No. 6,067,530) in view of Cedergren (U.S. Patent No. 5,164,718).



## **VII. GROUPING OF CLAIMS**

Claims 1-26 do not stand or fall together. Claims 5, 7, 9, 16, 17 and 22 do not stand or fall together with the group.

## **VIII. ARGUMENT**

Claims 1-26 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Brooks, Jr. et al. (U.S. Patent No. 6,067,530) in view of Cedergren (U.S. Patent No. 5,164,718). Appellants believe that the invention is patentable.

The Examiner states that Brooks, Jr. in view of Cedergren suggests the invention, and relies on Brooks, Jr. as suggesting the safe control system including a processor programmed to control operation of the electronic lock as well as operate as a central system controller when connected to at least one other remote safe. However, Brooks, Jr. fails to suggest this claimed feature, and as such, the combination of Brooks, Jr. in view of Cedergren fails to suggest the invention.

Brooks, Jr. describes a cash management system. When there are multiple electronic cash registers in the Brooks, Jr. system (Figure 1B), the controller 36 associated with each register 38 is coupled to the store host computer 43. The store host computer 43 and controllers 36 are synchronized, and a controller 36 transmits to the store host computer 43 data related to each of the drops in a drop safe 24. Appellants direct the Examiner's attention to the fact that store host computer 43 is not part of a safe, and more particularly, is not a central system controller that is part of a safe, but rather is a separate computer connected to a number of controllers 36. Appellants' invention is far different than Brooks, Jr. in that claim 1 recites a safe including a control system that includes a processor programmed to control operation of the electronic lock for the safe as well as operate as a central system controller

when connected to at least one other remote safe. That is, in the invention, the processor, which is part of the safe, operates as the central system controller. Brooks, Jr. does not illustrate the claimed feature and only illustrates a separate store host computer 43.

Providing a processor within a safe operating as a central system controller as recited by claim 1 is far different than a store host computer 43 receiving data from a number of individual cashier stations. The Examiner has not properly acknowledged this distinction, and there is no motivation to modify Brooks, Jr. to overcome this deficiency. Advantageously, the invention as recited by claim 1 provides an arrangement where a fully functional safe may in turn act as a central system controller when connected to at least one remote safe. Brooks, Jr. lacks these features recited in the claim 1 combination and there is no motivation to provide the missing features.

Cedergren fails to address this deficiency in Brooks, Jr., and the combination of Brooks, Jr. in view of Cedergren fails to suggest the invention. For these reasons, claim 1 is believed to be patentable.

In the final Action, the Examiner states that “a subsystem 22 comprises a plurality of cashier stations which itself is a form of an electronic safe further including a cash register 38, controller 36, and a drop safe 24 in Figures 1A-1B.” Appellants point out that claim 1 recites, in combination with other features, a safe including a control system including a processor programmed to control operation of the electronic lock and to operate as a central system controller when connected to at least one other remote safe to monitor and accumulate financial and operational information for each remote unit. The subsystem of Brooks, Jr. is an establishment subsystem 22 and cannot properly be considered to be a “safe” according to the ordinary and reasonable interpretation of the term “safe.” Thus, Brooks, Jr. is deficient.

Brooks, Jr. still fails to suggest the claimed safe including a control system that includes a processor programmed to control operation of the electronic lock for the safe as well

as operate as a central system controller when connected to at least one other remote safe. Appellants contend that store host computer 43 is not part of a safe, and more particularly is not a central system controller that is part of a safe, but rather is a separate computer connected to a number of controllers 36. On that note, store host computer 43 does not appear to operate an electronic lock for a safe.

Even using the Examiner's interpretation of the term "safe" which is believed by Appellant to be improper, Brooks, Jr. still does not result in a system that meets the required limitations of claim 1. More specifically, deeming establishment subsystem 22 as a safe does not provide a central system controller connected to at least one other remote safe to monitor and accumulate financial and operational information for each remote unit because in such an interpretation of the term "safe" the various units of Brooks, Jr. are all deemed to be part of a single "safe" 22 and there are no other remote safes in communication therewith.

In summary, Appellants direct the Examiner's attention to the fact that store host computer 43 is not part of a safe, and more particularly, is not a central system controller that is part of a safe, but rather is a separate computer connected to a number of controllers. In the Examiner's interpretation of the term "safe," there is no monitoring and accumulating financial and operational information for each remote unit as all units of Brooks, Jr. are deemed part of a single "safe."

Claims 2-10 are dependent related claims and are believed to be patentable for their dependency upon claim 1. Further, some of these dependent claims are believed to recite further patentable subject matter that is not suggested by Brooks, Jr. in view of Cedergren.

Claim 5 does not stand or fall together with claim 1 and recites an additional remote safe including a bill validator wherein the processor is programmed to maintain a record of all bills received and validated in the remote safe. The cited prior art fails to suggest

a processor in a safe programmed to maintain a record of all bills received and validated in a remote safe as recited by claim 5.

Claim 7 does not stand or fall together with claim 1 and recites an additional remote safe including a cash dispensing apparatus wherein the processor is programmed to maintain a record of all money loaded and dispensed from the remote safe. The cited prior art fails to suggest a processor in a safe programmed to maintain a record of money loaded and dispensed from a remote safe as recited by claim 7.

Claim 9 does not stand or fall together with claim 1 and recites one or more remote safe units with the processor being further programmed to accumulate and track deposits and withdrawals of money among other features. The cited prior art fails to suggest a processor in a safe programmed to accumulate and track deposits and withdrawals of money among other features at remote safes as recited by claim 9.

Claim 11 is an independent claim and recites a network of interconnected electronic locking and money control devices comprising a central processing system integrated with one of the electronic locking and money control devices, among other limitations. Brooks, Jr. in view of Cedergren fails to suggest a central processing system integrated with one of the electronic locking and money control devices (such as a safe) in a network of interconnected electronic locking and money control devices as recited by claim 11. Accordingly, claim 11 is believed to be patentable.


Claims 12-26 are dependent claims and are believed to be patentable for their dependency upon claim 11.

Claims 16, 17, and 22 do not stand or fall together with claim 1 for the same reasons as given above for claims 5, 7 and 9, respectively.

The fee of \$330.00 as applicable under the provisions of 37 C.F.R. § 1.17(c) is enclosed. Additionally, the fee of \$110.00 for a one-month extension of time (37 C.F.R. § 1.17(a)(1)) is also enclosed. Please charge any additional fee or credit any overpayment in connection with this filing to our Deposit Account No. 02-3978.

Respectfully submitted,

**MICHAEL J. SMITH et al.**

By:   
Jeremy J. Curcuri  
Registration No. 42,454  
Attorney for Appellants

Date: February 25, 2004

**BROOKS KUSHMAN P.C.**  
1000 Town Center, 22nd Floor  
Southfield, MI 48075-1238  
Phone: 248-358-4400  
Fax: 248-358-3351

*Enclosure - Appendix*

## **IX. APPENDIX - CLAIMS ON APPEAL**

1. An electronic lock and money control system comprising:  
at least one safe comprising:  
a housing having an interior compartment for securing money, and an outer door having an electronic lock mechanism to control access to the interior compartment;  
a data input device;  
an electronic display;  
a connector interface mounted to the housing; and  
a control system arranged to communicate with the data input device, electronic display, connector interface and electronic lock mechanism, wherein the control system includes a processor programmed to control operation of the electronic lock, as well as operate as a central system controller when connected to at least one other remote safe via the connector interface to monitor and accumulate financial and operational information for each remote unit.

2. The system of claim 1 wherein the at least one safe further comprises a bill validator apparatus mounted to the housing for receiving and validating bills of various denominations, and a storage device located within the safe for storing all validated bills, wherein the processor is programmed to maintain a record of all received and validated bills.

3. The system of claim 1 further comprising a cash dispensing apparatus mounted to the housing, the cash dispensing apparatus including a set of openings in the housing arranged to be loaded with containers each containing money of a predetermined value, and a separate opening and dispensing tray in the housing to dispense money containers for removal from the safe.

4. The system of claim 1 wherein the control system is further programmed to accumulate and track deposits and withdrawals of money, recognize user identification data,

and store transaction data and associated user identity data in a memory; wherein the processor is further arranged to process and sort stored transaction and operational data to generate an audit report and accounting reports.

5. The system of claim 1 wherein a remote safe unit is connected to the connector interface, the remote safe unit comprising a bill validator apparatus mounted to a housing thereof for receiving and validating bills of various denominations, and a storage device located within the remote safe for storing all validated bills, wherein the processor is programmed to maintain a record of all bills received and validated in the remote safe.

6. The system of claim 1 wherein the connection interface comprises a communications port to allow communication between the control system and a remote computer.

7. The system of claim 1 wherein a remote safe unit is connected to the connector interface, the remote safe unit comprising a cash dispensing apparatus mounted to a housing thereof, the cash dispensing apparatus including a set of openings in the housing arranged to be loaded with containers each containing money of a predetermined value, and a separate opening and dispensing tray in the housing to dispense cash containers for removal from the safe, wherein the processor is programmed to maintain a record of all money load and dispensed from the remote safe.

8. The system of claim 1 wherein the processor is programmed to recognize different levels of user system access authority.

9. The system of claim 1 wherein one or more remote safe units are connected to the connector interface, and the processor is further programmed to accumulate and track deposits and withdrawals of money, recognize user identification data, and store transaction data and associated user identity data in a memory for each remote unit, wherein

the processor is arranged to process and sort stored transaction and operational data to generate an individual and totaled audit and accounting reports.

10. The system of claim 9 wherein the processor is arranged to selectively generate financial reports including individual user reports, cash showing actual cash present by location, and end day reports, as well as an audit report itemizing the occurrence of selected events during a specific time period.

11. A network of interconnected electronic locking and money control devices comprising:

a central processing system integrated with one of the electronic locking and money control devices and arranged to control operation of the integrated device, wherein the central processing system is connected to all other network devices, and further arranged to communicate with all the other network devices and provide network control of all the other devices.

12. The network of claim 11 wherein the central processing system is arranged to automatically detect and assign network addresses for devices added to the network.

13. The network of claim 11 wherein the other network devices comprise a data entry subsystem arranged to receive and recognize user identification data, and transmit the data to the central processing system, wherein the central processing system is arranged to determine whether the user is authorized to access the system, and controlling operation of the network device based on the authorization determination.

14. The network of claim 11 wherein the data entry system is arranged to receive the user identification data in the form of at least a user number, electronic key, or biometric identification.



15. The network of claim 11 wherein a network device comprises an electronic lock and control arrangement.

16. The network of claim 11 wherein a network device is a cash dispensing apparatus, the cash dispensing apparatus including a set of openings arranged to be loaded with containers each containing cash of a predetermined value, and a separate opening and dispenser to dispense cash containers for removal from the safe, wherein the cash dispensing apparatus is arranged to maintain an accounting of all containers and provide a report to the central processing system.

17. The network of claim 11 wherein a network device comprises a universal interface designed to communicate with a plurality of types of bill validators arranged to receive and validate bills of various denominations, and a storage device for storing all validated bills, wherein the universal interface is programmed to maintain a record of all received and validated bills and provide a report to the central processing system.

18. The network of claim 11 wherein the central processing system is fully programmable via a data entry subsystem arranged to receive and recognize user identification data, and transmit the data to the central processing system.

19. The network of claim 11 wherein the central processing system is programmed to recognize different levels of user system access authority.

20. The network of claim 19 wherein the central processing system is programmed to recognize a level of user system access authority as a function of time or date.

21. The network of claim 11 wherein the central processing system is programmed to assign selected devices to an access group to provide flexible levels of user access.

22. The network of claim 11 wherein the central processing system is programmed to accumulate and track deposits and withdrawals of money from all devices on the network, recognize user identification data, and store transaction data and associated user identity data in a memory for each device connected to the network, wherein the central processing system is arranged to process and sort stored transaction and operational data to generate an individual and totaled audit and accounting reports.

23. The network of claim 11 wherein the central processing system is programmed to develop entities of money that comprise one or more of the devices connected to the network and process the developed entities as a single device for access and accounting purposes, while also being able to track each device separately.

24. The network of claim 23 wherein the central processing system is programmed such that entities of money may comprise other entities of money as well as one or more of the devices on the network or remote sub-networks and treat them as one for access and accounting purposes, without losing the ability to track each entity of money or device separately if needed.

25. The network of claims 11 wherein the central processing system is arranged to selectively generate financial reports including individual user reports, a cash report showing actual cash present by location, and end-day reports, as well as an audit report itemizing the occurrence of selected events during a specific time period.

26. The network of claim 11 wherein each device connected to the network is arranged to store individual configuration information, monetary totals and a selected audit information to facilitate replacement of the central processing system.

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